

What is claimed is:

- 1 1. A security management system for controlling a
2 security status of each of a plurality of managed
3 systems constituting an information system in
4 accordance with an information security policy
5 representing a policy of a security measure,
6 comprising:
- 7 a plurality of management sections corresponding
8 to at least one managed system and the information
9 security policy, each management section being for
10 controlling the security status of the managed system
11 corresponding thereto so as to adjust the security
12 status to the information security policy
13 corresponding thereto;
- 14 a database registering a correspondence of the
15 information security policy, the managed system and
16 each management section;
- 17 a security content reception section for
18 receiving a selection of a range of the information
19 security policy and the managed system from a user;
- 20 an extraction section for extracting from said
21 database the management section registered so as to
22 correspond to the information security policy and the

23 managed system included in the range in which said
24 security content reception section has received the
25 selection; and

26 a management control section for allowing the
27 management section extracted by said extraction
28 section to change the security status of the managed
29 system corresponding to the management section so as
30 to adjust to the information security policy corre-
31 sponding to the management section.

1 2. A security management system for auditing a security
2 status of each of a plurality of managed systems
3 constituting an information system, the security
4 status concerning an information security policy
5 representing a policy of a security measure,
6 comprising:

7 a plurality of audit sections corresponding to
8 at least one managed system and at least one
9 information security policy, each audit section being
10 for auditing the security status concerning the
11 corresponding information security policy of the
12 corresponding managed system;

13 a database registering a correspondence of the
14 information security policy, the managed system and
15 the audit section;

16 a security content reception section for

17 receiving a selection of a range of the information
18 security policy and the managed system from the user;
19 an extraction section for extracting from said
20 database the audit section registered so as to
21 correspond to the information security policy and the
22 managed system included in the range in which said
23 security content reception section has received the
24 selection; and
25 an audit control section for allowing the audit
26 section extracted by said extraction section to audit
27 the security status concerning the information
28 security policy of the managed system corresponding
29 to the audit section.

1 3. A security management system for controlling a
2 security status of each of a plurality of managed
3 systems constituting an information system in
4 accordance with an information security policy
5 representing a policy of a security measure,
6 comprising:

7 a plurality of management sections corresponding
8 to at least one managed system and at least one
9 information security policy, each management section
10 being for controlling the security status of the
11 corresponding managed system so as to adjust the
12 security state to the corresponding information

13 security policy;

14 a plurality of audit sections corresponding to

15 at least one managed system and at least one

16 information security policy, each audit section being

17 for auditing the security status concerning the

18 corresponding information security policy of the

19 corresponding managed system;

20 a database registering a correspondence of the

21 information security policy, the managed system, the

22 management section and the audit section;

23 a security content reception section for

24 receiving a selection of a range of the information

25 security policy and the managed system from a user;

26 an extraction section for extracting from said

27 database the management section and the audit section,

28 which are registered so as to correspond to the

29 information security policy and the managed system

30 included in the range in which said security content

31 reception section has received the selection;

32 a management control section for allowing the

33 management section extracted by said extraction

34 section to change the security status of the managed

35 system corresponding to the management section so as

36 to adjust to the information security policy corre-

37 sponding to the management section; and

38 an audit control section for allowing the audit

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22 extracted management program and to change the
23 security status of the managed system corresponding
24 to the management program so that the security status
25 thereof is adjusted to the information security policy
26 corresponding to the management program.

1 5. A security management method for auditing, with an
2 electronic computer, a security status of each of a
3 plurality of managed systems constituting an
4 information system, the security status concerning an
5 information security policy representing a policy of
6 a security measure, comprising the steps of:

7 receiving a range of a selection of the
8 information security policy and the managed system
9 from a user;

10 extracting an audit program registered so as to
11 correspond to the information security policy and the
12 managed system, which are included in the range in
13 which the selection has been received, among a
14 plurality of audit programs describing a processing
15 for auditing the security status concerning the
16 corresponding information security policy of the
17 corresponding managed system, the plurality of audit
18 programs corresponding to at least one information
19 security policy and at least one managed system, which
20 are previously stored; and

21 allowing the electronic computer to execute the
22 extracted audit program and to audit the security
23 status of the managed system corresponding to the audit
24 program, the security status concerning the
25 information security policy corresponding to the audit
26 program.

1 6. A storage medium storing a program for controlling
2 a security status of each of a plurality of managed
3 systems constituting an information system in
4 accordance with an information security policy
5 representing a policy of a security measure,
6 wherein said program is read out and executed by
7 an electronic computer,
8 to construct, on said electronic computer,
9 a security content reception section for
10 receiving a selection of a range of the information
11 security policy and the managed system from a user;
12 an extraction section for extracting a management
13 program corresponding to an information security
14 policy and a managed system, which are included in the
15 range in which said security content reception section
16 has received the selection, from a database storing
17 a plurality of management programs describing a
18 processing for controlling the security status of the
19 corresponding managed system so as to adjust the

20 security status of the managed system to the corre-
21 sponding information security policy, the plurality
22 of management programs corresponding at least one
23 managed system and at least one information security
24 policy; and

25 a management control section for allowing said
26 electronic computer to execute the management program
27 executed by said extraction section and to change the
28 security status of the managed system corresponding
29 to the extracted management program so as to adjust
30 the security status to the information security policy
31 corresponding to the extracted management program.

1 7. A storage medium storing a program for auditing a
2 security status concerning an information security
3 policy representing a policy of a security measure of
4 a plurality of managed systems constituting an
5 information system,

6 wherein said program is read out and executed by
7 an electronic computer,

8 to construct, on said electronic computer,

9 a security content reception section for
10 receiving a selection of a range of the information
11 security policy and the managed system from a user;

12 an extraction section for extracting an audit
13 program registered so as to correspond to an

14 information security policy and a managed system,
15 which are included in the range in which said security
16 content reception section has received the selection,
17 from a database storing a plurality of audit programs
18 describing a processing for auditing the security
19 status concerning the corresponding information
20 security policy of the corresponding managed system,
21 the plurality of audit programs corresponding to at
22 least one managed system and at least one information
23 security policy; and

24 an audit control section for allowing the
25 electronic computer to execute the audit program
26 extracted by said extraction section and to audit the
27 security status concerning the information security
28 policy corresponding to the audit program of the
29 managed system corresponding to the audit program.

1 8. A security management method for supporting a
2 security management of each of a plurality of managed
3 systems constituting an information system with an
4 electronic computer, comprising:

5 a security specification hatching step of ex-
6 tracting an information security policy made to
7 correspond to each managed system constituting an
8 information system designated by a user from a database
9 describing a correspondence of an information security

10 policy representing a policy of a security measure with
11 at least one managed system, to hatch security
12 specifications to be applied to the information
13 system;

14 a security diagnosis step of executing a
15 plurality of audit programs describing a processing
16 for auditing various information including a type of
17 the managed system and a software version, which are
18 stored so as to correspond to each set of the
19 information security policy and the managed system,
20 the information security policy and the managed system
21 being specified by security specifications hatched in
22 said security specification hatching step, as well as
23 a security status concerning the information security
24 policy of the managed system, to audit the various
25 information including the type and the software
26 version of the managed system constituting the
27 information system designated by the user, and to
28 diagnose a security of said information system; and

29 a security handling and management step of ex-
30 ecuting a management program designated by the user,
31 among a plurality of management programs describing
32 a processing for controlling the security status
33 concerning the information security policy of the
34 managed system stored so as to correspond to each set
35 of the information security policy and the managed

36 system, which are specified by the security
37 specifications hatched in said security specification
38 hatching steps, to allow said electronic computer to
39 change the security status of the managed system
40 corresponding to the management program so as to adjust
41 the security status to the information security policy
42 corresponding to the management program.

1 9. The security management method according to claim
2 8,

3 wherein, in said security diagnosis step, the
4 audit program made to correspond to each set of the
5 information security policy and the managed system,
6 which are specified by the security specifications
7 hatched in said security specification hatching step,
8 is extracted from a database describing a
9 correspondence of the information security policy, the
10 managed system and the audit program describing a
11 processing for auditing various information such as
12 a type and a software version of said managed system
13 as well as the security status concerning said
14 information security policy of said managed system,
15 and executed, to diagnose the security of the
16 information system designated by said user; and
17 in said security handling and management step,
18 the management programs made to correspond to each set

19 of the information security policy and the managed
20 system, which are specified by the security
21 specifications hatched in said security specification
22 hatching step, are extracted from a database
23 describing a correspondence of the information
24 security policy, the managed system and the management
25 program describing a processing for controlling the
26 security status concerning the security policy, the
27 managed system and said information security policy
28 of a security of said managed system, and the
29 management program designated by the user is extracted
30 among the extracted programs to be executed, to allow
31 the security status of the managed system
32 corresponding to the extracted management program to
33 adjust to the information security policy
34 corresponding to the management program.

1 10. The security management method according to claim
2 8,

3 wherein said security diagnose step is executed
4 periodically.

1 11. The security management method according to claim
2 8,

3 wherein, in accordance with a setting content
4 received from the user, said management program

5 changes the security status of the managed system
6 corresponding to the management program so as to adjust
7 the security status to the information security policy
8 corresponding to the management program.

1 12. The security management method according to claim
2 8,

3 wherein a security hole information published by
4 a security information organization including CERT or
5 Computer Emergency Response Team and diagnosis results
6 obtained in said security diagnose step which is
7 executed for the information system designated by the
8 user are reflected in the database describing the
9 correspondence of the information security policy with
10 at least one managed system and an audit/management
11 program stored so as to correspond to each set of the
12 information security policy and the managed system.

1 13. A security management system for supporting a
2 security management of managed systems constituting
3 an information system, comprising:

4 a database describing a correspondence of an
5 information security policy representing a policy of
6 a security measure with at least one managed system;

7 a security specification hatching section for
8 extracting an information security policy made to

9 correspond to each of the managed systems constituting
10 the information system designated by a user from said
11 database, to hatch security specifications to be
12 applied to the information system;

13 a plurality of audit sections for auditing
14 various information including a type and a software
15 version of the managed system as well as a security
16 status concerning the information security policy of
17 the managed system, each audit section being provided
18 so as to correspond to each set of the information
19 security policy and the managed system, which are
20 specified by security specifications hatched by said
21 security specification hatching section, and;

22 a security diagnosis section for diagnosing a
23 security of an information system designated by said
24 user, on the basis of diagnosis results in each of said
25 audit sections;

26 a plurality of management sections for
27 controlling a security status concerning the
28 information security policy of the managed system,
29 each management section being provided so as to
30 correspond to each set of the information security
31 policy and the managed system, which are specified by
32 security specifications hatched by said security
33 specification hatching step, and;

34 a security handling and management section for

Overall mean (SD)	
Age (years)	48.2 (10.5)
Gender	
Male	45 (86.5)
Female	7 (13.5)
Education (years)	12.5 (2.5)
Marital status	
Married	42 (80.4)
Single	3 (5.8)
Divorced	2 (3.9)
Widowed	3 (5.8)
Other	1 (1.9)
Occupation	
Professional	15 (28.8)
Managerial	12 (23.1)
Technical	10 (19.2)
Skilled	8 (15.4)
Unskilled	5 (9.6)
Other	2 (3.9)
Religion	
Muslim	38 (73.1)
Hindu	3 (5.8)
Christian	2 (3.9)
Other	4 (7.7)
Family size	3.5 (1.5)
Family income (USD/month)	150 (100)
Health insurance	
Yes	35 (67.3)
No	17 (32.7)
Comorbidities	
Hypertension	15 (28.8)
Diabetes	12 (23.1)
Asthma	8 (15.4)
Other	5 (9.6)
Medication	
Yes	35 (67.3)
No	17 (32.7)
Smoking status	
Smoker	10 (19.2)
Nonsmoker	35 (67.3)
Alcohol consumption	
Yes	5 (9.6)
No	40 (76.5)
Exercise frequency	
Regular	15 (28.8)
Irregular	12 (23.1)
None	13 (25.0)
Stress level	
High	10 (19.2)
Medium	15 (28.8)
Low	15 (28.8)
Life satisfaction	
Satisfied	25 (48.1)
Dissatisfied	27 (51.9)
Health status	
Good	30 (57.7)
Fair	15 (28.8)
Poor	7 (13.5)
Quality of life	
High	20 (38.5)
Low	27 (51.5)
Overall mean (SD)	
Age (years)	48.2 (10.5)
Gender	
Male	45 (86.5)
Female	7 (13.5)
Education (years)	12.5 (2.5)
Marital status	
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Occupation	
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Technical	10 (19.2)
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